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In the Claims:

1. (Amended) An enhanced LM609 grafted antibody exhibiting selective binding affinity to $\alpha_v\beta_3$, or a functional fragment thereof, comprising a CDR selected from the group consisting of a V_H CDR2 referenced as SEQ ID NO:104; a V_H CDR3 referenced as SEQ ID NO:106; and a V_L CDR1 referenced as SEQ ID NO:110, said grafted antibody or functional fragment thereof having integrin $\alpha_v\beta_3$ binding activity, integrin $\alpha_v\beta_3$ binding specificity or integrin $\alpha_v\beta_3$ -inhibitory activity, wherein LM609 refers to the murine antibody having the heavy chain variable region amino acid sequence referenced as SEQ ID NO:6 and the light chain variable region amino acid sequence referenced as SEQ ID NO:8.

3. (Amended) An enhanced LM609 grafted antibody having substantially the same sequence as an enhanced LM609 grafted antibody, or a functional fragment thereof, said grafted antibody comprising a CDR selected from the group consisting of a V_H CDR2 referenced as SEQ ID NO:104; a V_H CDR3 referenced as SEQ ID NO:106; and a V_L CDR1 referenced as SEQ ID NO:110, said grafted antibody or functional fragment thereof having integrin $\alpha_v\beta_3$ binding activity, integrin $\alpha_v\beta_3$ binding specificity or integrin $\alpha_v\beta_3$ -inhibitory activity, wherein LM609 refers to the murine antibody having the heavy chain variable region amino acid sequence referenced as SEQ ID NO:6 and the light chain variable region amino acid sequence referenced as SEQ ID NO:8.

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4. (Amended) An enhanced LM609 grafted antibody exhibiting selective binding affinity to $\alpha_v\beta_3$, or a functional fragment thereof, comprising the V_H CDR1 referenced as SEQ ID NO:34; the V_H CDR2 referenced as SEQ ID NO:102; the V_H CDR3 referenced as SEQ ID NO:106; the V_L CDR1 referenced as SEQ ID NO:108; the V_L CDR2 referenced as SEQ ID NO:112; and the V_L CDR3 referenced as SEQ ID NO:90, said grafted antibody or functional fragment thereof having integrin $\alpha_v\beta_3$ binding activity, integrin $\alpha_v\beta_3$ binding specificity or integrin $\alpha_v\beta_3$ -inhibitory activity, wherein LM609 refers to the murine antibody having the heavy chain variable region amino acid sequence referenced as SEQ ID NO:6 and the light chain variable region amino acid sequence referenced as SEQ ID NO:8.

D4 6. (Amended) An enhanced LM609 grafted antibody having substantially the same sequence as an enhanced LM609 grafted antibody, or a functional fragment thereof, comprising the V_H CDR1 referenced as SEQ ID NO:34; the V_H CDR2 referenced as SEQ ID NO:102; the V_H CDR3 referenced as SEQ ID NO:106; the V_L CDR1 referenced as SEQ ID NO:108; the V_L CDR2 referenced as SEQ ID NO:112; and the V_L CDR3 referenced as SEQ ID NO:90, said grafted antibody or functional fragment thereof having integrin $\alpha_v\beta_3$ binding activity, integrin $\alpha_v\beta_3$ binding specificity or integrin $\alpha_v\beta_3$ -inhibitory activity, wherein LM609 refers to the murine antibody having the heavy chain variable region amino acid sequence referenced as SEQ ID NO:6 and the light chain variable region amino acid sequence referenced as SEQ ID NO:8.

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7. (Amended) An enhanced LM609 grafted antibody exhibiting selective binding affinity to $\alpha_v\beta_3$, or a functional fragment thereof, comprising the V_H CDR1 referenced as SEQ ID NO:34; the V_H CDR2 referenced as SEQ ID NO:102; the V_H CDR3 referenced as SEQ ID NO:106; the V_L CDR1 referenced as SEQ ID NO:110; the V_L CDR2 referenced as SEQ ID NO:112; and the V_L CDR3 referenced as SEQ ID NO:90, said grafted antibody or functional fragment thereof having integrin $\alpha_v\beta_3$ binding activity, integrin $\alpha_v\beta_3$ binding specificity or integrin $\alpha_v\beta_3$ -inhibitory activity, wherein LM609 refers to the murine antibody having the heavy chain variable region amino acid sequence referenced as SEQ ID NO:6 and the light chain variable region amino acid sequence referenced as SEQ ID NO:8.

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9. (Amended) An enhanced LM609 grafted antibody having substantially the same sequence as an enhanced LM609 grafted antibody, or a functional fragment thereof, comprising the V_H CDR1 referenced as SEQ ID NO:34; the V_H CDR2 referenced as SEQ ID NO:102; the V_H CDR3 referenced as SEQ ID NO:106; the V_L CDR1 referenced as SEQ ID NO:110; the V_L CDR2 referenced as SEQ ID NO:112; and the V_L CDR3 referenced as SEQ ID NO:90, said grafted antibody or functional fragment thereof having integrin $\alpha_v\beta_3$ binding activity, integrin $\alpha_v\beta_3$ binding specificity or integrin $\alpha_v\beta_3$ -inhibitory activity, wherein LM609 refers to the murine antibody having the heavy chain variable region amino acid sequence referenced as SEQ ID NO:6 and the light chain variable region amino acid sequence referenced as SEQ ID NO:8.

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10. (Amended) An enhanced LM609 grafted antibody exhibiting selective binding affinity to $\alpha_v\beta_3$, or a functional fragment thereof, comprising the V_H CDR1 referenced as SEQ ID NO:34; the V_H CDR2 referenced as SEQ ID NO:104; the V_H CDR3 referenced as SEQ ID NO:106; the V_L CDR1 referenced as SEQ ID NO:110; the V_L CDR2 referenced as SEQ ID NO:112; and the V_L CDR3 referenced as SEQ ID NO:90, said grafted antibody or functional fragment thereof having integrin $\alpha_v\beta_3$ binding activity, integrin $\alpha_v\beta_3$ binding specificity or integrin $\alpha_v\beta_3$ -inhibitory activity, wherein LM609 refers to the murine antibody having the heavy chain variable region amino acid sequence referenced as SEQ ID NO:6 and the light chain variable region amino acid sequence referenced as SEQ ID NO:8.

12. (Amended) An enhanced LM609 grafted antibody having substantially the same sequence as an enhanced LM609 grafted antibody, or a functional fragment thereof, comprising the V_H CDR1 referenced as SEQ ID NO:34; the V_H CDR2 referenced as SEQ ID NO:104; the V_H CDR3 referenced as SEQ ID NO:106; the V_L CDR1 referenced as SEQ ID NO:110; the V_L CDR2 referenced as SEQ ID NO:112; and the V_L CDR3 referenced as SEQ ID NO:90, said grafted antibody or functional fragment thereof having integrin $\alpha_v\beta_3$ binding activity, integrin $\alpha_v\beta_3$ binding specificity or integrin $\alpha_v\beta_3$ -inhibitory activity, wherein LM609 refers to the murine antibody having the heavy chain variable region amino acid sequence referenced as SEQ ID NO:6 and the light chain variable region amino acid sequence referenced as SEQ ID NO:8.

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07 25. (Amended) An antibody, or a functional fragment thereof, comprising a CDR selected from the group consisting of a V_H CDR2 referenced as SEQ ID NO:104; a V_H CDR3 referenced as SEQ ID NO:106; and a V_L CDR1 referenced as SEQ ID NO:110, said antibody or functional fragment thereof having integrin $\alpha_v\beta_3$ binding activity, integrin $\alpha_v\beta_3$ binding specificity or integrin $\alpha_v\beta_3$ -inhibitory activity and exhibiting enhanced binding affinity to $\alpha_v\beta_3$ compared to LM609, wherein LM609 refers to the murine antibody having the heavy chain variable region amino acid sequence referenced as SEQ ID NO:6 and the light chain variable region amino acid sequence referenced as SEQ ID NO:8.

08 27. (Amended) An antibody, or functional fragment thereof, comprising the V_H CDR1 referenced as SEQ ID NO:34; a V_H CDR2 referenced as SEQ ID NO:102; a V_H CDR3 referenced as SEQ ID NO:106; a V_L CDR1 referenced as SEQ ID NO:108; a V_L CDR2 referenced as SEQ ID NO:112; and a V_L CDR3 referenced as SEQ ID NO:90, said antibody or functional fragment thereof having integrin $\alpha_v\beta_3$ binding activity, integrin $\alpha_v\beta_3$ binding specificity or integrin $\alpha_v\beta_3$ -inhibitory activity and exhibiting enhanced binding activity to $\alpha_v\beta_3$ compared to LM609, wherein LM609 refers to the murine antibody having the heavy chain variable region amino acid sequence referenced as SEQ ID NO:6 and the light chain variable region amino acid sequence referenced as SEQ ID NO:8.

09 29. (Amended) An antibody, or a functional fragment thereof, comprising a V_H CDR1 referenced as SEQ ID NO:34; a V_H CDR2 referenced as SEQ ID NO:102; a V_H CDR3 referenced as SEQ ID NO:106; a V_L CDR1 referenced as SEQ ID NO:110; a V_L CDR2

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referenced as SEQ ID NO:112; and a V_L CDR3 referenced as SEQ ID NO:90, said antibody or functional fragment thereof having integrin $\alpha_v\beta_3$ binding activity, integrin $\alpha_v\beta_3$ binding specificity or integrin $\alpha_v\beta_3$ -inhibitory activity and exhibiting enhanced binding activity to $\alpha_v\beta_3$ compared to LM609, wherein LM609 refers to the murine antibody having the heavy chain variable region amino acid sequence referenced as SEQ ID NO:6 and the light chain variable region amino acid sequence referenced as SEQ ID NO:8.

30. (Amended) The antibody of claim 29, wherein said functional fragment is selected from the group consisting of Fv, Fab, $F(ab)_2$ and scFV.

31. (Amended) An antibody, or a functional fragment thereof, comprising a V_H CDR1 referenced as SEQ ID NO:34; a V_H CDR2 referenced as SEQ ID NO:104; a V_H CDR3 referenced as SEQ ID NO:106; a V_L CDR1 referenced as SEQ ID NO:110; a V_L CDR2 referenced as SEQ ID NO:112; and a V_L CDR3 referenced as SEQ ID NO:90, said antibody or functional fragment thereof having integrin $\alpha_v\beta_3$ binding activity, integrin $\alpha_v\beta_3$ binding specificity or integrin $\alpha_v\beta_3$ -inhibitory activity and exhibiting enhanced binding activity to $\alpha_v\beta_3$ compared to LM609, wherein LM609 refers to the murine antibody having the heavy chain variable region amino acid sequence referenced as SEQ ID NO:6 and the light chain variable region amino acid sequence referenced as SEQ ID NO:8.

32. (Amended) The antibody of claim 30, wherein said functional fragment is selected from the group consisting of Fv, Fab, $F(ab)_2$ and scFV.

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include
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33. (Amended) A nucleic acid molecule having a nucleotide sequence selected from the group of nucleotide sequences consisting of SEQ ID NO:101; SEQ ID NO:103, SEQ ID NO:105, SEQ ID NO:107, SEQ ID NO:109, and SEQ ID NO:111.

Please add the following new claims.

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34. (New) An antibody, or functional fragment thereof, comprising a V_H CDR1 referenced as SEQ ID NO:34; a V_H CDR2 referenced as SEQ ID NO:102; a V_H CDR3 referenced as SEQ ID NO:106; a V_L CDR1 referenced as SEQ ID NO:108; a V_L CDR2 referenced as SEQ ID NO:112; *SUB E1* and a V_L CDR3 referenced as SEQ ID NO:90, said grafted antibody or functional fragment thereof having integrin $\alpha_v\beta_3$ binding activity, integrin $\alpha_v\beta_3$ binding specificity or integrin $\alpha_v\beta_3$ -inhibitory activity.

DID
2 35. (New) The antibody of claim *34*, wherein said functional fragment is selected from the group consisting of Fv, Fab, F(ab)₂ and scFV.

3 36. (New) A nucleic acid encoding the antibody or functional fragment of claim *34*.

4 37. (New) The nucleic acid of claim *36*, comprising a V_H CDR1 referenced as SEQ ID NO:33; a V_H CDR2 referenced as SEQ ID NO:101; a V_H CDR3 referenced as SEQ ID NO:105; a V_L CDR1 referenced as SEQ ID NO:107; a V_L CDR2 referenced as SEQ ID NO:111; and a V_L CDR3 referenced as SEQ ID NO:89.

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38. (New) An antibody, or a functional fragment thereof, comprising a V_H CDR1 referenced as SEQ ID NO:34; a V_H CDR2 referenced as SEQ ID NO:102; a V_H CDR3 referenced as SEQ ID NO:106; a V_L CDR1 referenced as SEQ ID NO:110; a V_L CDR2 referenced as SEQ ID NO:112; and a V_L CDR3 referenced as SEQ ID NO:90, said grafted antibody or functional fragment thereof having integrin $\alpha_v\beta_3$ binding activity, integrin $\alpha_v\beta_3$ binding specificity or integrin $\alpha_v\beta_3$ -inhibitory activity. ^{503 E2}

~~6~~ 39. (New) The antibody of claim ~~38~~⁵, wherein said functional fragment is selected from the group consisting of Fv, Fab, F(ab)₂ and scFV.

~~7~~ 40. (New) A nucleic acid encoding the antibody or functional fragment of claim ~~38~~⁵.

~~8~~ 41. (New) The nucleic acid of claim ~~40~~⁷, comprising a V_H CDR1 referenced as SEQ ID NO:33; a V_H CDR2 referenced as SEQ ID NO:101; a V_H CDR3 referenced as SEQ ID NO:105; a V_L CDR1 referenced as SEQ ID NO:109; a V_L CDR2 referenced as SEQ ID NO:111; and a V_L CDR3 referenced as SEQ ID NO:89.

42. (New) An antibody, or a functional fragment thereof, comprising a V_H CDR1 referenced as SEQ ID NO:34; a V_H CDR2 referenced as SEQ ID NO:104; a V_H CDR3 referenced as SEQ ID NO:106; a V_L CDR1 referenced as SEQ ID NO:110; a V_L CDR2 referenced as SEQ ID NO:112; and a V_L CDR3 referenced as SEQ ID NO:90, said grafted antibody or functional fragment thereof ^{503 E3}

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having integrin $\alpha_v\beta_3$ binding activity, integrin $\alpha_v\beta_3$ binding specificity or integrin $\alpha_v\beta_3$ -inhibitory activity. ^{SUG E3 CONT.}

¹⁰~~43~~. (New) The antibody of claim ⁹~~42~~, wherein said functional fragment is selected from the group consisting of Fv, Fab, F(ab)₂ and scFV.

¹¹~~44~~. (New) A nucleic acid encoding the antibody or functional fragment of claim ⁹~~42~~.

¹²~~45~~. (New) The nucleic acid of claim ¹¹~~44~~, comprising a V_H CDR1 referenced as SEQ ID NO:33; a V_H CDR2 referenced as SEQ ID NO:103; a V_H CDR3 referenced as SEQ ID NO:105; a V_L CDR1 referenced as SEQ ID NO:109; a V_L CDR2 referenced as SEQ ID NO:111; and a V_L CDR3 referenced as SEQ ID NO:89.

REMARKS

Claims 1-20 and 25-33 are currently under examination. Claims 1, 3, 4, 6, 7, 9, 10, 12, 25, 27, and 29-33 have been amended. New claims 34-45 have been added. Support for the amendments and new claims can be found throughout the specification and the claims as filed. Claims 3, 6, 9 and 12 have been rewritten in independent form, and support can be found in original claims 1, 4, 7 and 10, respectively. Support for the amendment to claims 1, 3, 4, 6, 7, 9, 10, 12, 25, 27, 29 and 31 can be found, for example, on page 5, lines 14-23, and page 15, lines 21-28. Support for new claims 34-45 can be found in original claims 4-12 and 27-33 and in Tables 12 and 14 on pages